

Appn. No.: 10/087,518
Amdt. Dated January 5, 2006
Reply to Office Action dated November 7, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Amended) A method of producing a background image representing data comprising the steps of:

producing a first encoding of the data into a first binary array;

producing a second encoding of the data into a second binary array;

representing the first binary array as a first set of modules of a first size of $n \times n$ pixels wherein each pixel is either white or black and every pixel in the module is identical to every other pixel in the module on nodes of a first lattice;

representing the second binary array as a second set of modules of a second size of $m \times m$ wherein each pixel is either white or black and every pixel in the module is identical to every other pixel in the module, which is smaller than the first size on nodes of a second lattice;

combining the first and second sets of modules; and

printing the first and second sets of modules.

2. (Original) The method claimed in claim 1, further including the step of:

superimposing graphic material on the modules before printing.

3. (Original) The method claimed in claim 2, wherein the graphic material is a postal indicia.

4. (Original) The method claimed in claim 1, wherein the modules on the first lattice and the modules on the second lattice do not overlap.

5. (Previously Amended) A method for producing a composite image comprising the steps of:

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producing a first image and a second image that embeds information in the first image;

representing information contained in the second image by a two-dimensional bar code;

filtering the two-dimensional bar code with a spreading algorithm that scrambles the information represented by the two-dimensional bar code;

splitting the bar code into an equal first part and an equal second part, wherein each first part and each second part will contain an upper portion and a lower portion such that the lower portion of the first part and the upper portion of the second part will be white or empty space;

applying a spreading algorithm to the first part and second part to scramble the information to further hide the information in the first and second parts in a manner that the spreading algorithm will move pixels in the first image and the second image so that the moved pixels will not be close together;

expanding the first and second parts over the entire image that is going to be printed; and

printing the first and second parts over the first image to produce an image containing hidden information.

6.(Original) The method claimed in claim 5, wherein the first image is a postal indicia.

7. (Original) The method claimed in claim 5, wherein the first and second images are printed on a medium.

8. (Original) The method claimed in claim 5, wherein:

at each location in which information from the first parts is going to be printed, the printed information will be a printed pixel of a specified dimension, and

at each location in which information from the plurality of second parts is going to be printed, the printed information will be a printed pixel of a specified dimension that differs from the pixels printed in the first parts.

9. (Original) The method claimed in claim 5, wherein when the first and second images are scanned and printed, the printed pixels of specified dimensions in the first and second parts will become larger.

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10. (Original) The method claimed in claim 9, wherein the change in size of the printed pixels of specified dimensions in the first and second parts is detectable by the unaided human eye.

11. (Original) The method claimed in claim 9, wherein the change in size of the printed pixels of specified dimensions in the first and second parts is detectable by a scanner.

12. (Original) The method claimed in claim 5, further including the steps of:

photocopying the first and second images; and
noticing a change in appearance of the second image.

13.(Original) The method claimed in claim 5, further including the steps of:

scanning the first and second images; and
noticing a change in appearance of the second image.

14. (Original) The method claimed in claim 5, wherein when the first and second images are photocopied, the printed pixels of specified dimensions in the first and second parts will become larger.

15. (Original)The method claimed in claim 14, wherein the change in size of the printed pixels of specified dimensions in the first and second parts is detectable by the unaided human eye.

16. (Original) The method claimed in claim 14, wherein the change in size of the printed pixels of specified dimensions in the first and second parts is detectable by the scanner.

17. (Original) The method claimed in claim 5, wherein the first image will not change in appearance when the first image is scanned or photocopied.